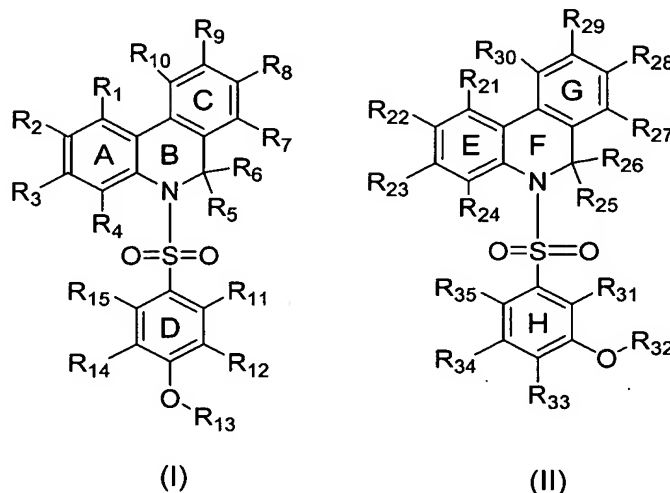


This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (original) A compound of formulae (I) or (II) having the structure



wherein

- R₁, R₂, R₃, R₄, R₇, R₈, R₉, R₁₀, R₁₁, R₁₂, R₁₄, and R₁₅ are each, independently, hydrogen, R₁₇, monofluoroalkyl, monofluoroalkenyl, aryl-R₁₆-, heteroaryl-R₁₆-, hydroxyalkyl, HO-R₁₆-, R₁₇-X-R₁₆-, HS-R₁₆-, R₁₇-S(O)-, R₁₇-S(O)₂-, R₁₇-SO₃-, R₁₇-S(O)₂NR-, -N(R)₂, -NR-C(NH₂)=NR, cyano, nitro, halogen, -OR, -SR, -SO₃R, -S(O)₂N(R)₂, -C(O)R, -C(R)=N-OR, -C(NH₂)=NR, -CO₂R, -OC(O)R, or -C(O)N(R)₂; or are taken together with either R_{p+1} or R_{p-1} linked with an -alkylene-, or -X-alkylene- group;
- R₅ is hydrogen, R₁₇, monofluoroalkyl, monofluoroalkenyl, aryl-R₁₆-, heteroaryl-R₁₆-, hydroxyalkyl, HO-R₁₆-, R₁₇-X-R₁₆-, HS-R₁₆-, -CR(O), -CO₂R, or -C(O)N(R)₂; or R₅ may be taken together with either R₆ or R₇ and linked with an -alkylene- or -X-alkylene- group;
- R₆ is hydrogen, R₁₇, monofluoroalkyl, monofluoroalkenyl, aryl-R₁₆-, heteroaryl-R₁₆-, hydroxyalkyl, HO-R₁₆-, R₁₇-X-R₁₆-, HS-R₁₆-, -CR(O), -CO₂R, or -C(O)N(R)₂; or R₆

may be taken together with either R₅ or R₇ and linked with an -alkylene- or -X-alkylene- group;

R₁₃ is R, R₁₇-X-R₁₆-, R₁₇-S(O)-, R₁₇-S(O)₂-, -SO₃R, -S(O)₂N(R)₂, or D-glucuronidate;

R₁₆ is -alkylene-, -cycloalkylene-, -alkylene-X-alkylene-, -alkylene-X-cycloalkylene-, -cycloalkylene-X-alkylene-, or -cycloalkylene-X-cycloalkylene-;

R₁₇ is alkyl, aryl, heteroaryl, cycloalkyl, alkenyl, cycloalkenyl, alkynyl, alkenyl-X-alkylene-, cycloalkenyl-X-alkylene-, or perfluoroalkyl;

R is, independently, hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, monofluoroalkyl, perfluoroalkyl, aryl, arylalkyl, heteroaryl, heteroarylalkyl, hydroxy-(C₂-C₆)alkyl, alkoxyalkyl, alkylthioalkyl, formyl, acyl, alkoxycarbonyl, -C(O)NH₂, alkylaminocarbonyl, dialkylaminocarbonyl, alkylaminoalkyl, or dialkylaminoalkyl; or when an atom contains two R groups, the R groups may be taken together linked with an -alkylene- group;

X is O, -NR-, -S(O)_m-, -C(O)-, -OC(O)-, -C(O)O-, -NRC(O)-, or -C(O)NR-;

m is 0, 1, or 2;

p is 2, 3, 6, 7, 8, 9, 12, 13, or 14;

R₂₁, R₂₂, R₂₃, R₂₄, R₂₇, R₂₈, R₂₉, R₃₀, R₃₁, R₃₃, R₃₄, and R₃₅ are, independently, hydrogen, R₁₇, monofluoroalkyl, monofluoroalkenyl, aryl-R₁₆-, heteroaryl-R₁₆-, hydroxyalkyl, HO-R₁₆-, R₁₇-Y-R₁₆-, HS-R₁₆-, R₁₇-S(O)-, R₁₇-S(O)₂-, R₁₇-SO₃-, R₁₇-S(O)₂NR-, -N(R)₂, -NR-C(NH₂)=NR, cyano, nitro, halogen, -OR, -SR, -SO₃R, -S(O)₂N(R)₂, -C(O)R, -C(R)=N-OR, -C(NH₂)=NR, -CO₂R, -OC(O)R, or -C(O)N(R)₂; or are taken together with either R_{q+1} or R_{q-1} linked with an -alkylene-, or -Y-alkylene- group;

R₂₅ is hydrogen, R₁₇, monofluoroalkyl, monofluoroalkenyl, aryl-R₁₆-, heteroaryl-R₁₆-, hydroxyalkyl, HO-R₁₆-, R₁₇-Y-R₁₆-, HS-R₁₆-, -CR(O), -CO₂R, or -C(O)N(R)₂; or R₂₅ may be taken together with either R₂₆ or R₂₇ and linked with an -alkylene- or -Y-alkylene- group;

R₂₆ is hydrogen, R₁₇, monofluoroalkyl, monofluoroalkenyl, aryl-R₁₆-, heteroaryl-R₁₆-, hydroxyalkyl, HO-R₁₆-, R₁₇-Y-R₁₆-, HS-R₁₆-, -CR(O), -CO₂R, or -C(O)N(R)₂; or R₂₆ may be taken together with either R₂₅ or R₂₇ and linked with an -alkylene- or -Y-alkylene- group;

R₃₂ is R, R₁₇-Y-R₁₆-, R₁₇-S(O)-, R₁₇-S(O)₂-, -SO₃R, -S(O)₂N(R)₂, or D-glucuronidate;

Y is O, -NR-, -S(O)_n-, -C(O)-, -OC(O)-, -C(O)O-, -NRC(O)-, or -C(O)NR-;

n is 0, 1, or 2;

q is 22, 23, 26, 27, 28, 29, 32, 33, or 34;

or a pharmaceutically acceptable salt thereof.

2. (original) The compound according to claim 1, wherein the compound is of formula (I) or a pharmaceutical acceptable salt thereof.

3. (original) The compound according to claim 2, wherein R₁₃ is hydrogen, or a pharmaceutically acceptable salt thereof.

4. (original) The compound according to claim 3, wherein
R₁, R₂, R₃, R₄, R₇, R₈, R₉, R₁₀, R₁₁, R₁₂, R₁₄, and R₁₅ are each, independently, hydrogen, R₁₇,
aryl-R₁₆-, R₁₇-X-R₁₆-, hydroxyalkyl, HO-R₁₆-, halogen, -OR, -COR, or -CO₂R;
R₅ and R₆ are each, independently, hydrogen or R₁₇;
R₁₆ is -alkylene-;
R₁₇ is alkyl, aryl, heteroaryl, or perfluoroalkyl;
R is hydrogen or alkyl; or a pharmaceutically acceptable salt thereof.

5. (original) The compound according to claim 1, wherein the compound is of formula (II) or a pharmaceutical acceptable salt thereof.

6. (original) The compound according to claim 5, wherein R₃₂ is hydrogen, or a pharmaceutically acceptable salt thereof.

7. (original) The compound according to claim 6, wherein
R₂₁, R₂₂, R₂₃, R₂₄, R₂₇, R₂₈, R₂₉, R₃₀, R₃₁, R₃₃, R₃₄, and R₃₅ are each, independently, hydrogen,
R₁₇, aryl-R₁₆-, R₁₇-Y-R₁₆-, hydroxyalkyl, HO-R₁₆-, halogen, -OR, -COR, or -CO₂R;

R₂₅ and R₂₆ are each, independently, hydrogen or R₁₇;

R₁₆ is -alkylene-;

R₁₇ is alkyl, aryl, heteroaryl, or perfluoroalkyl;

R is hydrogen or alkyl; or a pharmaceutically acceptable salt thereof.

8. (currently amended) The compound according to claim 1, which is

- a) 4-[(6-methylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- b) 4-[(*S*)-6-methylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- c) 4-[(*R*)-6-methylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- d) 4-[(2-bromo-6-methylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- e) 2-methyl-4-[(6-methylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- f) 4-[(2-bromo-6-methylphenanthridin-5(6*H*)-yl)sulfonyl]-2-methylphenol;
- g) 4-[(6-butylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- h) 4-[(2-bromo-6-butylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- i) 4-[(6-phenylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- j) 4-[(*S*)-6-phenylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- k) 4-[(*R*)-6-phenylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- l) 4-[(2-bromo-6-phenylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- m) 2-bromo-4-[(2-bromo-6-phenylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- n) 4-[(6-*tert*-butylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- o) 4-[(*R*)-6-*tert*-butylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- p) 4-[(*S*)-6-*tert*-butylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- q) 4-[(2-bromo-6-*tert*-butylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- r) 4-[(6-ethylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- s) 4-[(2-bromo-6-ethylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- t) 4-[(6-ethylphenanthridin-5(6*H*)-yl)sulfonyl]-2-methylphenol;
- u) 4-[(2-bromo-6-ethylphenanthridin-5(6*H*)-yl)sulfonyl]-2-methylphenol;
- v) 4-[(*S*^{*})-6-[(*R*^{*})-1-methylpropyl]phenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- w) 4-[(6-methylphenanthridin-5(6*H*)-yl)sulfonyl]benzene-1,2-diol;

- *) 2-hydroxy-5-[(6-methylphenanthridin-5(6*H*)-yl)sulfonyl]benzoic acid;
- y) ethyl 2-ethoxy-5-[(6-methylphenanthridin-5(6*H*)-yl)sulfonyl]benzoate;
- z) 2-(hydroxymethyl)-4-[(6-methylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- aa) 2-hydroxy-5-[(6-methylphenanthridin-5(6*H*)-yl)sulfonyl]benzaldehyde;
- bb) 4-[(6-ethyl-2-thien-3-ylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- ee) 4-{[6-ethyl-2-(3-methoxyphenyl)phenanthridin-5(6*H*)-yl)sulfonyl}phenol;
- dd) 3-{6-ethyl-5-[(4-hydroxyphenyl)sulfonyl]-5,6-dihydrophenanthridin-2-yl}phenol;
- ee) 4-[(2-dibenzo[*b,d*]furan-4-yl-6-ethylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- ff) 4-[(8-fluoro-6-methylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- gg) 4-{[(*S*)-8-fluoro-6-methylphenanthridin-5(6*H*)-yl)sulfonyl}phenol;
- hh) 4-{[(*R*)-8-fluoro-6-methylphenanthridin-5(6*H*)-yl)sulfonyl}phenol;
- ii) 4-[(8-fluoro-6-methylphenanthridin-5(6*H*)-yl)sulfonyl]-2-methylphenol;
- jj) 5-[(4-hydroxyphenyl)sulfonyl]-6-methyl-5,6-dihydrophenanthridin-9-ol;
- kk) 5-[(4-hydroxy-3-methylphenyl)sulfonyl]-6-methyl-5,6-dihydrophenanthridin-9-ol;
- ll) 5-[(4-hydroxy-3-methylphenyl)sulfonyl]-6-methyl-5,6-dihydrophenanthridin-7-ol;
- mm) 5-[(4-hydroxyphenyl)sulfonyl]-6-methyl-5,6-dihydrophenanthridin-7-ol;
- nn) 4-[(6-ethyl-8-fluorophenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- oo) 4-[(6-ethyl-8-fluorophenanthridin-5(6*H*)-yl)sulfonyl]-2-methylphenol;
- pp) 4-[(6-ethyl-7-methylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- qq) 4-[(6-ethyl-9-methylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- rr) 4-[(2-bromo-6-ethyl-8-fluorophenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- ss) 4-[(2-bromo-8-fluoro-6-methylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- tt) 2-chloro-4-[(6-ethyl-8-fluorophenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- uu) 4-[(6-ethyl-8-fluoro-2-phenylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- vv) 3-[(8-fluoro-6-methylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- ww) 2-fluoro-4-[(8-fluoro-6-methylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- xx) 4-[(8-fluoro-6-methylphenanthridin-5(6*H*)-yl)sulfonyl]benzene-1,2-diol;
- yy) 4-[(6-ethyl-8-fluoro-2-methylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- zz) 4-[(6-ethyl-8-fluoro-2-thien-3-ylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- aaa) 4-[(6-ethyl-8-fluorophenanthridin-5(6*H*)-yl)sulfonyl]phenyl 3,3-dimethylbutanoate;

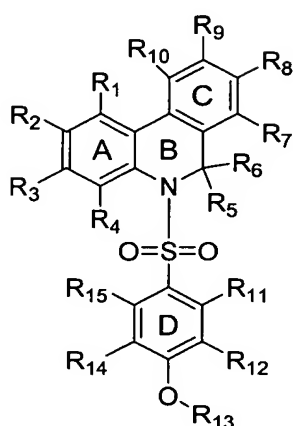
- bbb) 4-[(6-ethyl-8-fluorophenanthridin-5(6*H*)-yl)sulfonyl]phenyl propionate;
- eee) 4-[(6-ethyl-8-fluorophenanthridin-5(6*H*)-yl)sulfonyl]phenyl benzoate;
- ddd) 2-fluoro-4-[(6-methylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- eee) 4-[(2-bromo-6-methylphenanthridin-5(6*H*)-yl)sulfonyl]-2-fluorophenol;
- fff) 4-[(6-methylphenanthridin-5(6*H*)-yl)sulfonyl]-2-(trifluoromethyl)phenol;
- ggg) 2,6-dimethyl-4-[(6-methylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- hhh) 4-[(6,8-dimethylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- iii) 4-[(8-chloro-6-methylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- jjj) 4-[(2-bromo-8-chloro-6-methylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- kkk) 2-{6-ethyl-5-[(4-hydroxyphenyl)sulfonyl]-5,6-dihydrophenanthridin-2-yl}phenol;
- lll) 4-{[6-ethyl-2-[4-(methylthio)phenyl]phenanthridin-5(6*H*)-yl]sulfonyl}phenol;
- mmm) 4-{[6-ethyl-2-[(*E*)-2-phenylethenyl]phenanthridin-5(6*H*)-yl]sulfonyl}phenol;
- nnn) 4-{[2-(1,1'-biphenyl-4-yl)-6-ethylphenanthridin-5(6*H*)-yl]sulfonyl}phenol;
- ooo) 4-{[2-(3-chlorophenyl)-6-ethylphenanthridin-5(6*H*)-yl]sulfonyl}phenol;
- ppp) 4-[(6-ethyl-2-quinolin-8-ylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- qqq) 4-[(6-ethyl-2-phenylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- rrr) 4-{[6-ethyl-2-(2-methylphenyl)phenanthridin-5(6*H*)-yl]sulfonyl}phenol;
- sss) 4-[(6-ethyl-2-thianthren-1-ylphenanthridin-5(6*H*)-yl)sulfonyl]phenol;
- ttt) 4-{[2-(1-benzofuran-2-yl)-6-ethylphenanthridin-5(6*H*)-yl]sulfonyl}phenol;
- uuu) 4-{[6-ethyl-2-(4-hydroxyphenyl)phenanthridin-5(6*H*)-yl]sulfonyl}phenol;
- vvv) 4-{[2-(2-chlorophenyl)-6-ethylphenanthridin-5(6*H*)-yl]sulfonyl}phenol;
- www) 4-{[6-ethyl-2-(4-ethylphenyl)phenanthridin-5(6*H*)-yl]sulfonyl}phenol;
- xxx) 1-(5-{6-ethyl-5-[(4-hydroxyphenyl)sulfonyl]-5,6-dihydrophenanthridin-2-yl}thien-2-yl)ethanone;
- yyy) 5-{6-ethyl-5-[(4-hydroxyphenyl)sulfonyl]-5,6-dihydrophenanthridin-2-yl}pyrimidine-2,4-diol;
- zzz) 4-{[6-ethyl-2-(2-hydroxyphenyl)phenanthridin-5(6*H*)-yl]sulfonyl}-2-methylphenol;
- aaaa) 4-[(6-ethyl-2-thien-3-ylphenanthridin-5(6*H*)-yl)sulfonyl]-2-methylphenol;
- bbbb) 4-{[6-ethyl-2-[4-(methylthio)phenyl]phenanthridin-5(6*H*)-yl]sulfonyl}-2-methylphenol;

- eeee) 4- {[6-ethyl-2-[(*E*)-2-phenylethenyl]phenanthridin-5(6*H*)-yl]sulfonyl}-2-methylphenol;
- dddd) 4- {6-ethyl-5-[(4-hydroxy-3-methylphenyl)sulfonyl]-5,6-dihydrophenanthridin-2-yl} benzene-1,2-diol;
- eeee) 4- {[2-(1,1'-biphenyl-4-yl)-6-ethylphenanthridin-5(6*H*)-yl]sulfonyl}-2-methylphenol;
- ffff) 4- {[6-ethyl-2-(3-hydroxyphenyl)phenanthridin-5(6*H*)-yl]sulfonyl}-2-methylphenol;
- gggg) 4- {[2-(3-chlorophenyl)-6-ethylphenanthridin-5(6*H*)-yl]sulfonyl}-2-methylphenol;
- hhhh) 4- {[6-ethyl-2-[(*E*)-hept-1-enyl]phenanthridin-5(6*H*)-yl]sulfonyl}-2-methylphenol;
- iiii) 4- [(6-ethyl-2-pyridin-4-ylphenanthridin-5(6*H*)-yl)sulfonyl]-2-methylphenol;
- jjjj) 4- [(6-ethyl-2-quinolin-8-ylphenanthridin-5(6*H*)-yl)sulfonyl]-2-methylphenol;
- kkkk) 4- {[6-ethyl-2-(2-methylphenyl)phenanthridin-5(6*H*)-yl]sulfonyl}-2-methylphenol;
- llll) 4- {[2-(1-benzothien-2-yl)-6-ethylphenanthridin-5(6*H*)-yl]sulfonyl}-2-methylphenol;
- mmmm) 4- {[2-(1-benzothien-3-yl)-6-ethylphenanthridin-5(6*H*)-yl]sulfonyl}-2-methylphenol;
- nnnn) 4- [(2-dibenzo[*b,d*]furan-4-yl-6-ethylphenanthridin-5(6*H*)-yl)sulfonyl]-2-methylphenol;
- oooo) 4- {[2-(1-benzofuran-2-yl)-6-ethylphenanthridin-5(6*H*)-yl]sulfonyl}-2-methylphenol;
- pppp) 4- {[6-ethyl-2-(4-hydroxyphenyl)phenanthridin-5(6*H*)-yl]sulfonyl}-2-methylphenol;
- qqqq) 4- {[2-(2-chlorophenyl)-6-ethylphenanthridin-5(6*H*)-yl]sulfonyl}-2-methylphenol;
- rrrr) 4- {[6-ethyl-2-(4-ethylphenyl)phenanthridin-5(6*H*)-yl]sulfonyl}-2-methylphenol;
- ssss) 1-(5-{6-ethyl-5-[(4-hydroxy-3-methylphenyl)sulfonyl]-5,6-dihydrophenanthridin-2-yl} thien-2-yl)ethanone;
- tttt) 5-{6-ethyl-5-[(4-hydroxy-3-methylphenyl)sulfonyl]-5,6-dihydrophenanthridin-2-yl} pyrimidine-2,4-diol;;
- 4- {[(6*R*)-3,8-difluoro-6-methylphenanthridin-5(6*H*)-yl]sulfonyl} phenol;
- 4- {[(6*S*)-3,8-difluoro-6-methylphenanthridin-5(6*H*)-yl]sulfonyl} phenol;

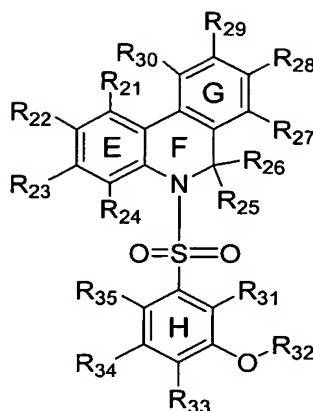
3-[[(6R)-3,8-difluoro-6-methylphenanthridin-5(6H)-yl]sulfonyl}phenol;
3-[[(6S)-3,8-difluoro-6-methylphenanthridin-5(6H)-yl]sulfonyl}phenol;
4-[[(6S)-3,8-difluoro-6-methylphenanthridin-5(6H)-yl]sulfonyl}benzene-1,3-diol;
4-[[(6R)-3,8-difluoro-6-methylphenanthridin-5(6H)-yl]sulfonyl}benzene-1,3-diol;
4-[(3-fluoro-6-methylphenanthridin-5(6H)-yl)sulfonyl]phenol;
3-[(3-fluoro-6-methylphenanthridin-5(6H)-yl)sulfonyl]phenol;
3-[[(6R)-3-fluoro-6-methylphenanthridin-5(6H)-yl]sulfonyl}phenol;
3-[[(6S)-3-fluoro-6-methylphenanthridin-5(6H)-yl]sulfonyl}phenol;
4-[3-fluoro-6-methylphenanthridin-5(6H)-yl]sulfonyl}benzene-1,3-diol;
4-[[(6R)-3-fluoro-6-methylphenanthridin-5(6H)-yl]sulfonyl}benzene-1,3-diol;
4-[[(6S)-3-fluoro-6-methylphenanthridin-5(6H)-yl]sulfonyl}benzene-1,3-diol;
4-[(2-fluoro-6-methylphenanthridin-5(6H)-yl)sulfonyl]phenol;
3-[(2-fluoro-6-methylphenanthridin-5(6H)-yl)sulfonyl]phenol;
4-[(3,9-difluoro-6-methylphenanthridin-5(6H)-yl)sulfonyl]phenol;
3-[(3,9-difluoro-6-methylphenanthridin-5(6H)-yl)sulfonyl]phenol;
4-[(2,9-difluoro-6-methylphenanthridin-5(6H)-yl)sulfonyl]phenol;
3-[(2,9-difluoro-6-methylphenanthridin-5(6H)-yl)sulfonyl]phenol;
3-[(3-chloro-6-methylphenanthridin-5(6H)-yl)sulfonyl]phenol;
3-[[(6R)-3-chloro-6-methylphenanthridin-5(6H)-yl]sulfonyl}phenol;
3-[[(6S)-3-chloro-6-methylphenanthridin-5(6H)-yl]sulfonyl}phenol;
4-[(3-chloro-6-methylphenanthridin-5(6H)-yl)sulfonyl]phenol;
4-[[(6R)-3-chloro-6-methylphenanthridin-5(6H)-yl]sulfonyl}phenol;
4-[[(6S)-3-chloro-6-methylphenanthridin-5(6H)-yl]sulfonyl}phenol;
4-[[(6R)-3-chloro-6-methylphenanthridin-5(6H)-yl]sulfonyl}benzene-1,3-diol;
4-[[(6S)-3-chloro-6-methylphenanthridin-5(6H)-yl]sulfonyl}benzene-1,3-diol;
4-[[(6S)-8-fluoro-6-methylphenanthridin-5(6H)-yl]sulfonyl}phenyl sulfamate;
4-[(6-ethyl-8-fluoro-2-pyridin-3-yl)phenanthridin-5(6H)-yl]sulfonyl]phenol;

or a pharmaceutically acceptable salt thereof.

9. (original) A pharmaceutical composition, which comprises a compound of formulae (I) or (II) having the structure



(I)



(II)

wherein

R_1 , R_2 , R_3 , R_4 , R_7 , R_8 , R_9 , R_{10} , R_{11} , R_{12} , R_{14} , and R_{15} are each, independently, hydrogen, R_{17} , monofluoroalkyl, monofluoroalkenyl, aryl- R_{16} -, heteroaryl- R_{16} -, hydroxyalkyl, HO- R_{16} -, R_{17} -X- R_{16} -, HS- R_{16} -, R_{17} -S(O)-, R_{17} -S(O) $_2$ -, R_{17} -SO $_3$ -, R_{17} -S(O) $_2$ N(R) $_2$ -, -N(R) $_2$ -, -NR-C(NH $_2$)=NR, cyano, nitro, halogen, -OR, -SR, -SO $_3$ R, -S(O) $_2$ N(R) $_2$ -, -C(O)R, -C(R)=N-OR, -C(NH $_2$)=NR, -CO $_2$ R, -OC(O)R, or -C(O)N(R) $_2$; or are taken together with either R_{p+1} or R_{p-1} linked with an -alkylene-, or -X-alkylene- group;

R_5 is hydrogen, R_{17} , monofluoroalkyl, monofluoroalkenyl, aryl- R_{16} -, heteroaryl- R_{16} -, hydroxyalkyl, HO- R_{16} -, R_{17} -X- R_{16} -, HS- R_{16} -, -CR(O), -CO $_2$ R, or -C(O)N(R) $_2$; or R_5 may be taken together with either R_6 or R_7 and linked with an -alkylene- or -X-alkylene- group;

R_6 is hydrogen, R_{17} , monofluoroalkyl, monofluoroalkenyl, aryl- R_{16} -, heteroaryl- R_{16} -, hydroxyalkyl, HO- R_{16} -, R_{17} -X- R_{16} -, HS- R_{16} -, -CR(O), -CO $_2$ R, or -C(O)N(R) $_2$; or R_6 may be taken together with either R_5 or R_7 and linked with an -alkylene- or -X-alkylene- group;

R_{13} is R, R_{17} -X- R_{16} -, R_{17} -S(O)-, R_{17} -S(O) $_2$ -, -SO $_3$ R, -S(O) $_2$ N(R) $_2$, or D-glucuronidate;

R_{16} is -alkylene-, -cycloalkylene-, -alkylene-X-alkylene-, -alkylene-X-cycloalkylene-, -cycloalkylene-X-alkylene-, or -cycloalkylene-X-cycloalkylene-;

R₁₇ is alkyl, aryl, heteroaryl, cycloalkyl, alkenyl, cycloalkenyl, alkynyl, alkenyl-X-alkylene-, cycloalkenyl-X-alkylene-, or perfluoroalkyl;

R is, independently, hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, monofluoroalkyl, perfluoroalkyl, aryl, arylalkyl, heteroaryl, heteroarylalkyl, hydroxy-(C₂-C₆)alkyl, alkoxyalkyl, alkylthioalkyl, formyl, acyl, alkoxycarbonyl, -C(O)NH₂, alkylaminocarbonyl, dialkylaminocarbonyl, alkylaminoalkyl, or dialkylaminoalkyl; or when an atom contains two R groups, the R groups may be taken together linked with an -alkylene- group;

X is O, -NR-, -S(O)_m-, -C(O)-, -OC(O)-, -C(O)O-, -NRC(O)-, or -C(O)NR-;

m is 0, 1, or 2;

p is 2, 3, 6, 7, 8, 9, 12, 13, or 14;

R₂₁, R₂₂, R₂₃, R₂₄, R₂₇, R₂₈, R₂₉, R₃₀, R₃₁, R₃₃, R₃₄, and R₃₅ are, independently, hydrogen, R₁₇; monofluoroalkyl, monofluoroalkenyl, aryl-R₁₆-, heteroaryl-R₁₆-, hydroxyalkyl, HO-R₁₆-, R₁₇-Y-R₁₆-, HS-R₁₆-, R₁₇-S(O)-, R₁₇-S(O)₂-, R₁₇-SO₃-, R₁₇-S(O)₂NR-, -N(R)₂, -NR-C(NH₂)=NR, cyano, nitro, halogen, -OR, -SR, -SO₃R, -S(O)₂N(R)₂, -C(O)R, -C(R)=N-OR, -C(NH₂)=NR, -CO₂R, -OC(O)R, or -C(O)N(R)₂; or are taken together with either R_{q+1} or R_{q-1} linked with an -alkylene-, or -Y-alkylene- group;

R₂₅ is hydrogen, R₁₇, monofluoroalkyl, monofluoroalkenyl, aryl-R₁₆-, heteroaryl-R₁₆-, hydroxyalkyl, HO-R₁₆-, R₁₇-Y-R₁₆-, HS-R₁₆-, -CR(O), -CO₂R, or -C(O)N(R)₂; or R₂₅ may be taken together with either R₂₆ or R₂₇ and linked with an -alkylene- or -Y-alkylene- group;

R₂₆ is hydrogen, R₁₇, monofluoroalkyl, monofluoroalkenyl, aryl-R₁₆-, heteroaryl-R₁₆-, hydroxyalkyl, HO-R₁₆-, R₁₇-Y-R₁₆-, HS-R₁₆-, -CR(O), -CO₂R, or -C(O)N(R)₂; or R₂₆ may be taken together with either R₂₅ or R₂₇ and linked with an -alkylene- or -Y-alkylene- group;

R₃₂ is R, R₁₇-Y-R₁₆-, R₁₇-S(O)-, R₁₇-S(O)₂-, -SO₃R, -S(O)₂N(R)₂, or D-glucuronidate;

Y is O, -NR-, -S(O)_n-, -C(O)-, -OC(O)-, -C(O)O-, -NRC(O)-, or -C(O)NR-;

n is 0, 1, or 2;

q is 22, 23, 26, 27, 28, 29, 32, 33, or 34;

or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.

10. (currently amended) A method of treating ~~or inhibiting~~ chronic inflammatory disease in a mammal in need thereof, which comprises administering to said mammal an effective amount of a compound of claim 1.
11. (currently amended) A method of treating ~~or inhibiting~~ rheumatoid arthritis, spondyloarthropathies, osteoarthritis, psoriatic arthritis, or juvenile arthritis in a mammal in need thereof, which comprises administering to said mammal an effective amount of a compound of claim 1.
12. (currently amended) A method of treating ~~or inhibiting~~ inflammatory bowel disease, Crohn's disease, ulcerative colitis, or indeterminate colitis in a mammal in need thereof, which comprises administering to said mammal an effective amount of a compound of claim 1.
13. (currently amended) A method of treating ~~or inhibiting~~ psoriasis in a mammal in need thereof, which comprises administering to said mammal an effective amount of a compound of claim 1.
14. (currently amended) A method of treating ~~or inhibiting~~ asthma or chronic obstructive pulmonary disease in a mammal in need thereof, which comprises administering to said mammal an effective amount of a compound of claim 1.
15. (currently amended) A method of treating ~~or inhibiting~~ stroke, ischemia, or reperfusion injury in a mammal in need thereof, which comprises administering to said mammal an effective amount of a compound of claim 1.
16. (currently amended) A method of lowering cholesterol, triglycerides, Lp(a), and LDL levels; ~~inhibiting or~~ treating hypercholesteremia, hyperlipidemia, cardiovascular disease, atherosclerosis, acute coronary syndrome, peripheral vascular disease, restenosis, or vasospasm in a mammal in need thereof, which comprises administering to said mammal an effective amount of a compound of claim 1.

17. (currently amended) A method of treating ~~or inhibiting~~ Alzheimer's disease, cognitive decline, or senile dementia in a mammal in need thereof, which comprises administering to said mammal an effective amount of a compound of claim 1.

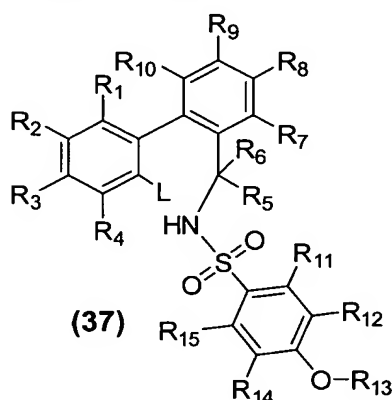
18. (currently amended) A method of treating ~~or inhibiting~~ type II diabetes in a mammal in need thereof, which comprises administering to said mammal an effective amount of a compound of claim 1.

19. (currently amended) A method of treating ~~or inhibiting~~ sepsis in a mammal in need thereof, which comprises administering to said mammal an effective amount of a compound of claim 1.

20. (new) The compound according to claim 2, wherein R_{13} is $-S(O)_2NH_2$, or a pharmaceutically acceptable salt thereof.

21. (new) The compound according to claim 5, wherein R_{32} is $-S(O)_2NH_2$, or a pharmaceutically acceptable salt thereof.

22. (new) A process comprising providing a sulfonamide of formula 37:



wherein

R_1 , R_2 , R_3 , R_4 , R_7 , R_8 , R_9 , R_{10} , R_{11} , R_{12} , R_{14} , and R_{15} are each, independently, hydrogen, R_{17} , monofluoroalkyl, monofluoroalkenyl, aryl- R_{16^-} , heteroaryl- R_{16^-} , hydroxyalkyl,

HO-R₁₆-, R₁₇-X-R₁₆-, HS-R₁₆-, R₁₇-S(O)-, R₁₇-S(O)₂-, R₁₇-SO₃-, R₁₇-S(O)₂NR-, -N(R)₂-, -NR-C(NH₂)=NR, cyano, nitro, halogen, -OR, -SR, -SO₃R, -S(O)₂N(R)₂-, -C(O)R, -C(R)=N-OR, -C(NH₂)=NR, -CO₂R, -OC(O)R, or -C(O)N(R)₂; or are taken together with either R_{p+1} or R_{p-1} linked with an -alkylene-, or -X-alkylene- group;

R₅ is hydrogen, R₁₇, monofluoroalkyl, monofluoroalkenyl, aryl-R₁₆-, heteroaryl-R₁₆-, hydroxyalkyl, HO-R₁₆-, R₁₇-X-R₁₆-, HS-R₁₆-, -CR(O), -CO₂R, or -C(O)N(R)₂; or R₅ may be taken together with either R₆ or R₇ and linked with an -alkylene- or -X-alkylene- group;

R₆ is hydrogen, R₁₇, monofluoroalkyl, monofluoroalkenyl, aryl-R₁₆-, heteroaryl-R₁₆-, hydroxyalkyl, HO-R₁₆-, R₁₇-X-R₁₆-, HS-R₁₆-, -CR(O), -CO₂R, or -C(O)N(R)₂; or R₆ may be taken together with either R₅ or R₇ and linked with an -alkylene- or -X-alkylene- group;

R₁₃ is R, R₁₇-X-R₁₆-, R₁₇-S(O)-, R₁₇-S(O)₂-, -SO₃R, -S(O)₂N(R)₂-, or D-glucuronide;

R₁₆ is -alkylene-, -cycloalkylene-, -alkylene-X-alkylene-, -alkylene-X-cycloalkylene-, -cycloalkylene-X-alkylene-, or -cycloalkylene-X-cycloalkylene-;

R₁₇ is alkyl, aryl, heteroaryl, cycloalkyl, alkenyl, cycloalkenyl, alkynyl, alkenyl-X-alkylene-, cycloalkenyl-X-alkylene-, or perfluoroalkyl;

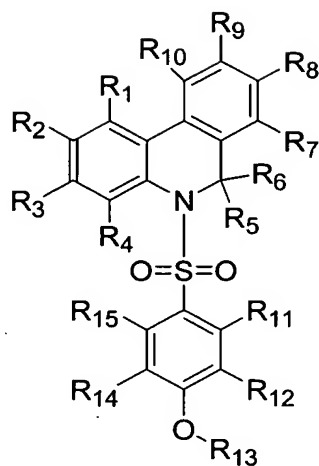
R is, independently, hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, monofluoroalkyl, perfluoroalkyl, aryl, arylalkyl, heteroaryl, heteroarylalkyl, hydroxy-(C₂-C₆)alkyl, alkoxyalkyl, alkylthioalkyl, formyl, acyl, alkoxycarbonyl, -C(O)NH₂, alkylaminocarbonyl, dialkylaminocarbonyl, alkylaminoalkyl, or dialkylaminoalkyl; or when an atom contains two R groups, the R groups may be taken together linked with an -alkylene- group;

X is O, -NR-, -S(O)_m-, -C(O)-, -OC(O)-, -C(O)O-, -NRC(O)-, or -C(O)NR-;

m is 0, 1, or 2; and

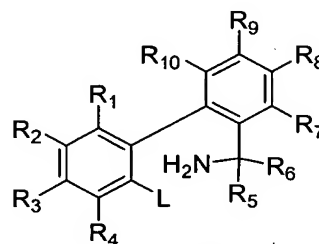
p is 2, 3, 6, 7, 8, 9, 12, 13, or 14; and

treating the sulfonamide of formula 37 with potassium carbonate to produce a phenanthridine of formula I:



(I)

23. (new) The process of claim 22 further comprising providing the S enantiomer of the biphenylamine of formula 36:

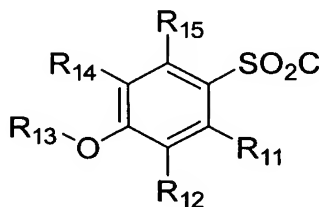


(36)

wherein

L is fluorine or chlorine; and

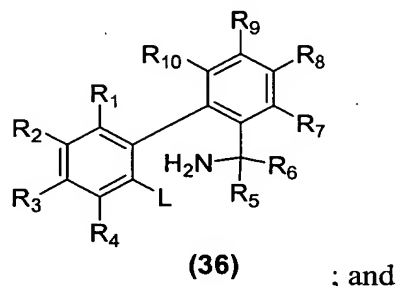
reacting the S enantiomer of the biphenylamine of formula 36 with a compound of formula 3 or an anhydride:



(3)

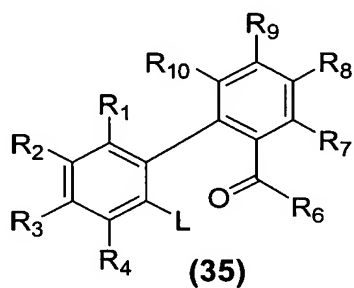
to produce a sulfonamide of formula 37.

24. (new) The process of claim 23 further comprising providing a biphenylamine of formula 36:



separating the biphenylamine of formula 36 into its respective enantiomers.

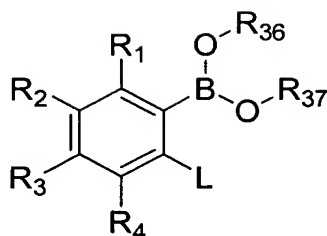
25. (new) The process of claim 24 further comprising providing a compound of formula 35:



reacting the compound of formula 35 with an ammonium source optionally in the presence of an acid catalyst to produce an intermediate imine; and

reducing the intermediate imine with a hydride source to produce a biphenylamine of formula 36.

26. (new) The process of claim 25 further comprising providing a compound of formula 33:

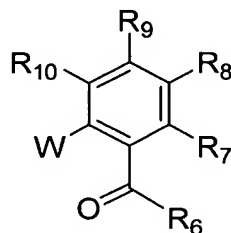


(33)

wherein

R₃₆ and R₃₇ are, independently, hydrogen or (C₁-C₄) lower straight chain or (C₃-C₆) branched chain alkyl, or R₃₆ and R₃₇ are taken together to form a pinacol moiety; and

reacting the compound of formula 33 in the presence of a coupling catalyst with a compound of formula 34:

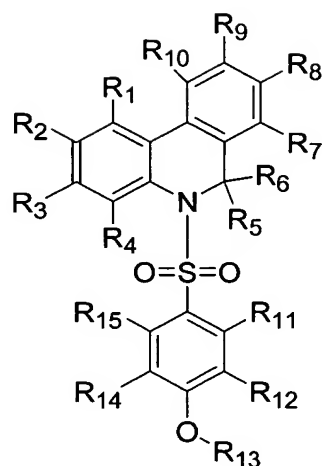


(34)

wherein

W is a chlorine, bromine, or iodine atom, or a triflate (-OSO₂CF₃) moiety;
to produce a compound of formula 35.

27. (new) A process for preparing a compound of formula I:



(I)

wherein

R_1 , R_2 , R_3 , R_4 , R_7 , R_8 , R_9 , R_{10} , R_{11} , R_{12} , R_{14} , and R_{15} are each, independently, hydrogen, R_{17} , monofluoroalkyl, monofluoroalkenyl, aryl- R_{16} -, heteroaryl- R_{16} -, hydroxyalkyl, HO- R_{16} -, R_{17} -X- R_{16} -, HS- R_{16} -, R_{17} -S(O)-, R_{17} -S(O)₂-, R_{17} -SO₃-, R_{17} -S(O)₂NR-, -N(R)₂, -NR-C(NH₂)=NR, cyano, nitro, halogen, -OR, -SR, -SO₃R, -S(O)₂N(R)₂, -C(O)R, -C(R)=N-OR, -C(NH₂)=NR, -CO₂R, -OC(O)R, or -C(O)N(R)₂; or are taken together with either R_{p+1} or R_{p-1} linked with an -alkylene-, or -X-alkylene- group;

R_5 is hydrogen, R_{17} , monofluoroalkyl, monofluoroalkenyl, aryl- R_{16} -, heteroaryl- R_{16} -, hydroxyalkyl, HO- R_{16} -, R_{17} -X- R_{16} -, HS- R_{16} -, -CR(O), -CO₂R, or -C(O)N(R)₂; or R_5 may be taken together with either R_6 or R_7 and linked with an -alkylene- or -X-alkylene- group;

R_6 is hydrogen, R_{17} , monofluoroalkyl, monofluoroalkenyl, aryl- R_{16} -, heteroaryl- R_{16} -, hydroxyalkyl, HO- R_{16} -, R_{17} -X- R_{16} -, HS- R_{16} -, -CR(O), -CO₂R, or -C(O)N(R)₂; or R_6 may be taken together with either R_5 or R_7 and linked with an -alkylene- or -X-alkylene- group;

R_{13} is R, R_{17} -X- R_{16} -, R_{17} -S(O)-, R_{17} -S(O)₂-, -SO₃R, -S(O)₂N(R)₂, or D-glucuronidate;

R_{16} is -alkylene-, -cycloalkylene-, -alkylene-X-alkylene-, -alkylene-X-cycloalkylene-, -cycloalkylene-X-alkylene-, or -cycloalkylene-X-cycloalkylene-;

R₁₇ is alkyl, aryl, heteroaryl, cycloalkyl, alkenyl, cycloalkenyl, alkynyl, alkenyl-X-alkylene-, cycloalkenyl-X-alkylene-, or perfluoroalkyl;

R is, independently, hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, monofluoroalkyl, perfluoroalkyl, aryl, arylalkyl, heteroaryl, heteroarylalkyl, hydroxy-(C₂-C₆)alkyl, alkoxyalkyl, alkylthioalkyl, formyl, acyl, alkoxycarbonyl, -C(O)NH₂, alkylaminocarbonyl, dialkylaminocarbonyl, alkylaminoalkyl, or dialkylaminoalkyl; or when an atom contains two R groups, the R groups may be taken together linked with an -alkylene- group;

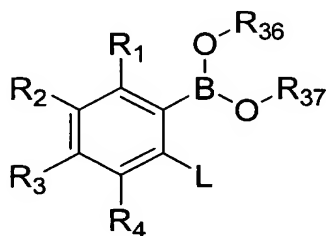
X is O, -NR-, -S(O)_m-, -C(O)-, -OC(O)-, -C(O)O-, -NRC(O)-, or -C(O)NR-;

m is 0, 1, or 2; and

p is 2, 3, 6, 7, 8, 9, 12, 13, or 14;

comprising

- reacting a compound of formula 33:



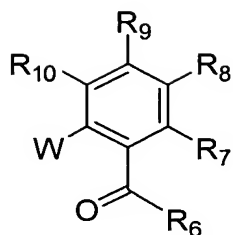
(33)

wherein

L is fluorine or chlorine; and

R₃₆ and R₃₇ are, independently, hydrogen or (C₁-C₄) lower straight chain or (C₃-C₆) branched chain alkyl, or R₃₆ and R₃₇ are taken together to form a pinacol moiety;

in the presence of a coupling catalyst with a compound of formula 34:

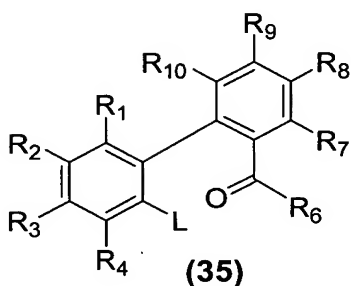


(34)

wherein

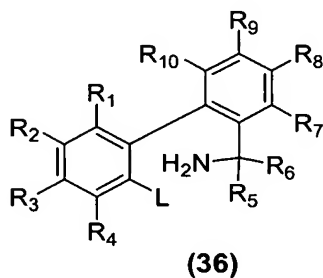
W is a chlorine, bromine, or iodine atom, or a triflate (-OSO₂CF₃) moiety;

to produce a compound of formula 35:



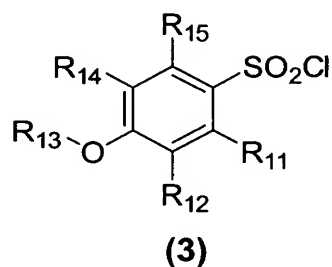
(35)

- reacting the compound of formula 35 with an ammonium source optionally in the presence of an acid catalyst to produce an intermediate imine;
- reducing the intermediate imine with a hydride source to produce a biphenylamine of formula 36:

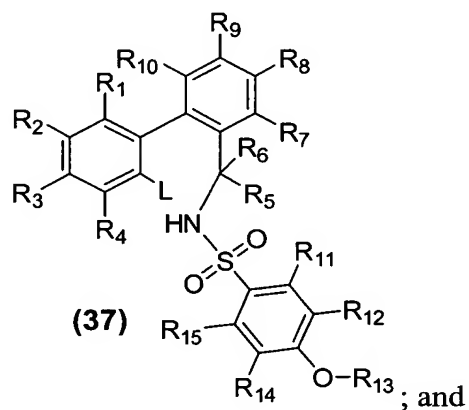


(36)

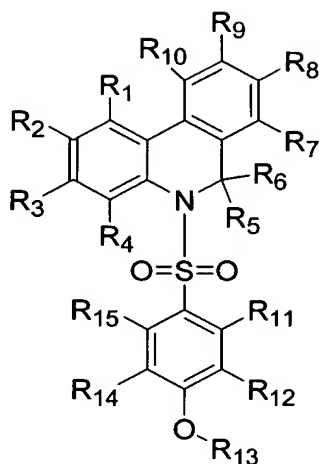
- separating the biphenylamine of formula 36 into its respective enantiomers;
- reacting the S enantiomer of the biphenylamine of formula 36 with a compound of formula 3 or an anhydride:



to produce a sulfonamide of formula 37:

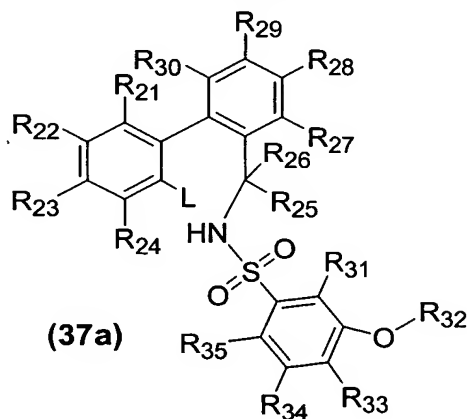


- treating the sulfonamide of formula 37 with potassium carbonate to produce a phenanthridine of formula I:



(I)

28. (new) A process comprising providing a sulfonamide of formula 37a:



wherein

R_{21} , R_{22} , R_{23} , R_{24} , R_{27} , R_{28} , R_{29} , R_{30} , R_{31} , R_{33} , R_{34} , and R_{35} are, independently, hydrogen, R_{17} , monofluoroalkyl, monofluoroalkenyl, aryl- R_{16} -, heteroaryl- R_{16} -, hydroxyalkyl, HO- R_{16} -, R_{17} -Y- R_{16} -, HS- R_{16} -, R_{17} -S(O)-, R_{17} -S(O)₂-, R_{17} -SO₃-, R_{17} -S(O)₂NR-, -N(R)₂-, -NR-C(NH₂)=NR, cyano, nitro, halogen, -OR, -SR, -SO₃R, -S(O)₂N(R)₂-, -C(O)R, -C(R)=N-OR, -C(NH₂)=NR, -CO₂R, -OC(O)R, or -C(O)N(R)₂; or are taken together with either R_{q+1} or R_{q-1} linked with an -alkylene-, or -Y-alkylene- group;

R_{25} is hydrogen, R_{17} , monofluoroalkyl, monofluoroalkenyl, aryl- R_{16} -, heteroaryl- R_{16} -, hydroxyalkyl, HO- R_{16} -, R_{17} -Y- R_{16} -, HS- R_{16} -, -CR(O), -CO₂R, or -C(O)N(R)₂; or R_{25}

may be taken together with either R₂₆ or R₂₇ and linked with an -alkylene- or -Y-alkylene- group;

R₂₆ is hydrogen, R₁₇, monofluoroalkyl, monofluoroalkenyl, aryl-R₁₆-, heteroaryl-R₁₆-, hydroxyalkyl, HO-R₁₆-, R₁₇-Y-R₁₆-, HS-R₁₆-, -CR(O), -CO₂R, or -C(O)N(R)₂; or R₂₆ may be taken together with either R₂₅ or R₂₇ and linked with an -alkylene- or -Y-alkylene- group;

R₃₂ is R, R₁₇-Y-R₁₆-, R₁₇-S(O)-, R₁₇-S(O)₂-, -SO₃R, -S(O)₂N(R)₂, or D-glucuronidate;

R₁₆ is -alkylene-, -cycloalkylene-, -alkylene-X-alkylene-, -alkylene-X-cycloalkylene-, -cycloalkylene-X-alkylene-, or -cycloalkylene-X-cycloalkylene-;

R₁₇ is alkyl, aryl, heteroaryl, cycloalkyl, alkenyl, cycloalkenyl, alkynyl, alkenyl-X-alkylene-, cycloalkenyl-X-alkylene-, or perfluoroalkyl;

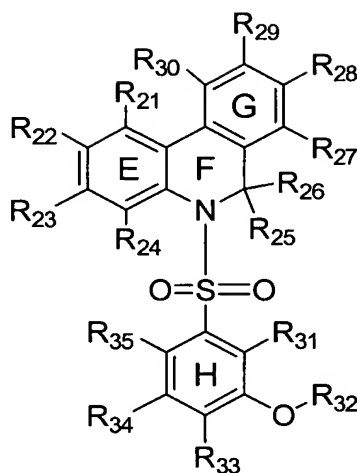
R is, independently, hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, monofluoroalkyl, perfluoroalkyl, aryl, arylalkyl, heteroaryl, heteroarylalkyl, hydroxy-(C₂-C₆)alkyl, alkoxyalkyl, alkylthioalkyl, formyl, acyl, alkoxycarbonyl, -C(O)NH₂, alkylaminocarbonyl, dialkylaminocarbonyl, alkylaminoalkyl, or dialkylaminoalkyl; or when an atom contains two R groups, the R groups may be taken together linked with an -alkylene- group;

Y is O, -NR-, -S(O)_n-, -C(O)-, -OC(O)-, -C(O)O-, -NRC(O)-, or -C(O)NR-;

n is 0, 1, or 2; and

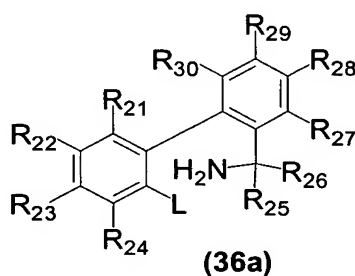
q is 22, 23, 26, 27, 28, 29, 32, 33, or 34; and

treating the sulfonamide of formula 37a with potassium carbonate to produce a phenanthridine of formula II:



(II)

29. (new) The process of claim 28 further comprising providing the S enantiomer of the biphenylamine of formula 36a:

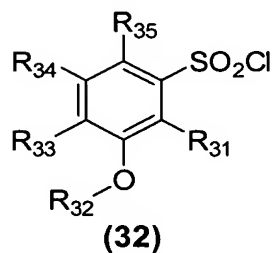


(36a)

wherein

L is fluorine or chlorine; and

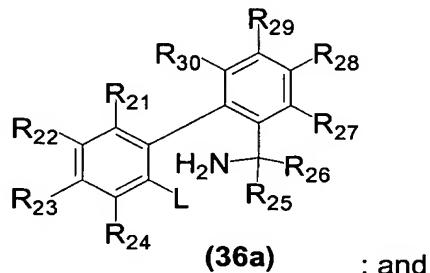
reacting the S enantiomer of the biphenylamine of formula 36a with a compound of formula 32 or an anhydride:



(32)

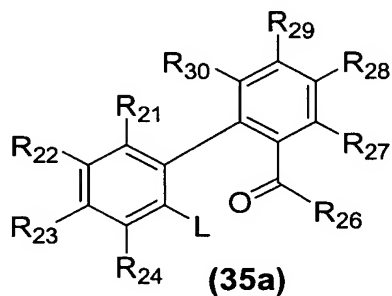
to produce a sulfonamide of formula 37a.

30. (new) The process of claim 29 further comprising providing a biphenylamine of formula 36a:



separating the biphenylamine of formula 36a into its respective enantiomers.

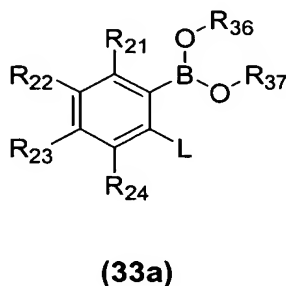
31. (new) The process of claim 30 further comprising providing a compound of formula 35a:



reacting the compound of formula 35a with an ammonium source optionally in the presence of an acid catalyst to produce an intermediate imine; and

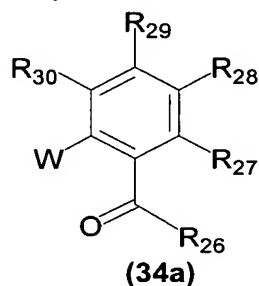
reducing the intermediate imine with a hydride source to produce a biphenylamine of formula 36.

32. (new) The process of claim 31 further comprising providing a compound of formula 33a:



wherein

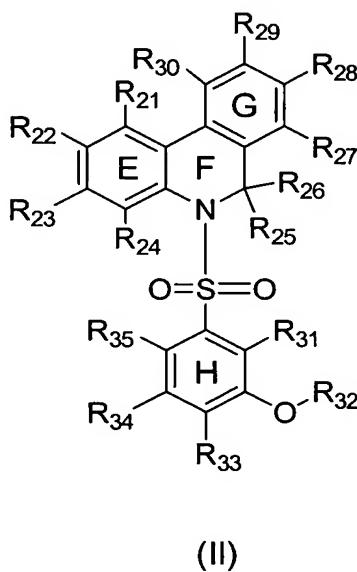
R_{36} and R_{37} are, independently, hydrogen or (C_1-C_4) lower straight chain or (C_3-C_6) branched chain alkyl, or R_{36} and R_{37} are taken together to form a pinacol moiety; and
 reacting the compound of formula 33a in the presence of a coupling catalyst with a compound of formula 34a:



wherein

W is a chlorine, bromine, or iodine atom, or a triflate ($-\text{OSO}_2\text{CF}_3$) moiety;
 to produce a compound of formula 35.

33. (new) A process for preparing a compound of formula II:



wherein

R₂₁, R₂₂, R₂₃, R₂₄, R₂₇, R₂₈, R₂₉, R₃₀, R₃₁, R₃₃, R₃₄, and R₃₅ are, independently, hydrogen, R₁₇, monofluoroalkyl, monofluoroalkenyl, aryl-R₁₆-, heteroaryl-R₁₆-, hydroxyalkyl, HO-R₁₆-, R₁₇-Y-R₁₆-, HS-R₁₆-, R₁₇-S(O)-, R₁₇-S(O)₂-, R₁₇-SO₃-, R₁₇-S(O)₂NR-, -N(R)₂, -NR-C(NH₂)=NR, cyano, nitro, halogen, -OR, -SR, -SO₃R, -S(O)₂N(R)₂, -C(O)R, -C(R)=N-OR, -C(NH₂)=NR, -CO₂R, -OC(O)R, or -C(O)N(R)₂; or are taken together with either R_{q+1} or R_{q-1} linked with an -alkylene-, or -Y-alkylene- group;

R₂₅ is hydrogen, R₁₇, monofluoroalkyl, monofluoroalkenyl, aryl-R₁₆-, heteroaryl-R₁₆-, hydroxyalkyl, HO-R₁₆-, R₁₇-Y-R₁₆-, HS-R₁₆-, -CR(O), -CO₂R, or -C(O)N(R)₂; or R₂₅ may be taken together with either R₂₆ or R₂₇ and linked with an -alkylene- or -Y-alkylene- group;

R₂₆ is hydrogen, R₁₇, monofluoroalkyl, monofluoroalkenyl, aryl-R₁₆-, heteroaryl-R₁₆-, hydroxyalkyl, HO-R₁₆-, R₁₇-Y-R₁₆-, HS-R₁₆-, -CR(O), -CO₂R, or -C(O)N(R)₂; or R₂₆ may be taken together with either R₂₅ or R₂₇ and linked with an -alkylene- or -Y-alkylene- group;

R₃₂ is R, R₁₇-Y-R₁₆-, R₁₇-S(O)-, R₁₇-S(O)₂-, -SO₃R, -S(O)₂N(R)₂, or D-glucuronidate;

R₁₆ is -alkylene-, -cycloalkylene-, -alkylene-X-alkylene-, -alkylene-X-cycloalkylene-, -cycloalkylene-X-alkylene-, or -cycloalkylene-X-cycloalkylene-;

R₁₇ is alkyl, aryl, heteroaryl, cycloalkyl, alkenyl, cycloalkenyl, alkynyl, alkenyl-X-alkylene-, cycloalkenyl-X-alkylene-, or perfluoroalkyl;

R is, independently, hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, monofluoroalkyl, perfluoroalkyl, aryl, arylalkyl, heteroaryl, heteroarylalkyl, hydroxy-(C₂-C₆)alkyl, alkoxyalkyl, alkylthioalkyl, formyl, acyl, alkoxycarbonyl, -C(O)NH₂, alkylaminocarbonyl, dialkylaminocarbonyl, alkylaminoalkyl, or dialkylaminoalkyl; or when an atom contains two R groups, the R groups may be taken together linked with an -alkylene- group;

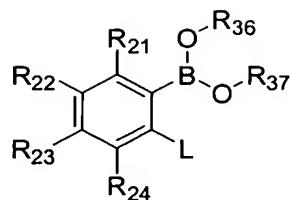
Y is O, -NR-, -S(O)_n-, -C(O)-, -OC(O)-, -C(O)O-, -NRC(O)-, or -C(O)NR-;

n is 0, 1, or 2;

q is 22, 23, 26, 27, 28, 29, 32, 33, or 34;

comprising

- reacting a compound of formula 33a:



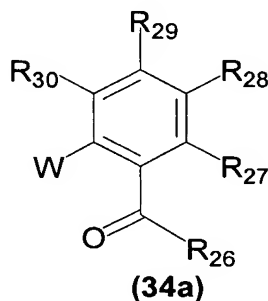
(33a)

wherein

L is fluorine or chlorine; and

R₃₆ and R₃₇ are, independently, hydrogen or (C₁-C₄) lower straight chain or (C₃-C₆) branched chain alkyl, or R₃₆ and R₃₇ are taken together to form a pinacol moiety;

in the presence of a coupling catalyst with a compound of formula 34a:

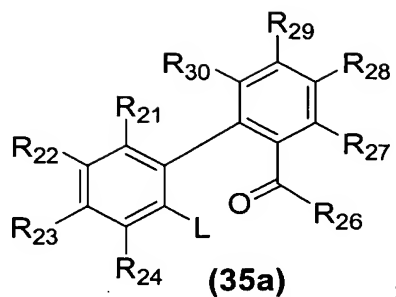


(34a)

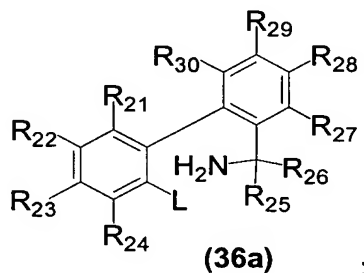
wherein

W is a chlorine, bromine, or iodine atom, or a triflate (-OSO₂CF₃) moiety;

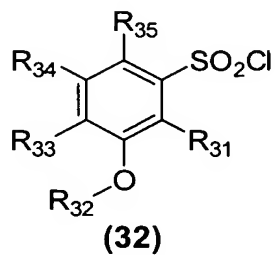
to produce a compound of formula 35a:



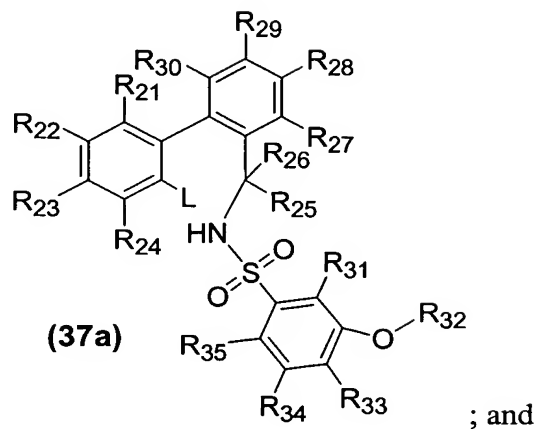
- reacting the compound of formula 35a with an ammonium source optionally in the presence of an acid catalyst to produce an intermediate imine;
- reducing the intermediate imine with a hydride source to produce a biphenylamine of formula 36a:



- separating the biphenyl amine of formula 36a into its respective enantiomers;
- reacting the S enantiomer of the biphenylamine of formula 36a with a compound of formula 32 or an anhydride:



to produce a sulfonamide of formula 37a:



- treating the sulfonamide of formula 37a with potassium carbonate to produce a phenanthridine of formula II:

